UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,857	11/26/2003	Prathyusha K. Salla	132958XX-D/YOD GEMS:0264	9694
68174 GE HEALTHC	7590 02/05/2008 ARE	3	EXAMINER	
c/o FLETCHER YODER, PC			MEHTA, PARIKHA SOLANKI	
P.O. BOX 6922 HOUSTON, TX			ART UNIT	PAPER NUMBER
110001014, 174 772072207			3737	
			MAIL DATE	DELIVERY MODE
			02/05/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		. >	R
	Application No.	Applicant(s)	<u> </u>
	10/723,857	SALLA ET AL.	
Office Action Summary	Examiner	Art Unit	
	Parikha S. Mehta	3737	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence a	ddress
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from 1, cause the application to become ABANDONE	N. nely filed the mailing date of this of D (35 U.S.C. § 133).	
Status .			
Responsive to communication(s) filed on 20 No.     This action is <b>FINAL</b> . 2b) ☐ This     Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro		e merits is
Disposition of Claims			
4)  Claim(s) 1-40 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-40 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/or	vn from consideration.		·
Application Papers	•		•
9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on is/are: a) ☐ acce Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☒ The oath or declaration is objected to by the Ex	epted or b) objected to by the drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 C	
Priority under 35 U.S.C. § 119	•		
12) Acknowledgment is made of a claim for foreign  a) All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority application from the International Bureau  * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this Nationa	l Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 10/19/07.	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal F 6)  Other:	ate	

#### **DETAILED ACTION**

### Response to Arguments

1. Applicant's arguments with respect to claims 5-12 and 17-20 have been considered but are moot in view of the new ground(s) of rejection.

Regarding all other pending claims, Applicant has presented no new arguments or amendments to overcome the previous rejections in view of Huesman (2001). Accordingly, claims 1-4, 13-16 and 21-40 remain rejected under 35 U.S.C. 102(b) in view of Huesman (2001), as reiterated below.

#### Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to **patentability** as defined in 37 CFR 1.56.

## **Double Patenting**

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Application/Control Number:

10/723,857 Art Unit: 3737

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-40 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-32 of copending Application No. 10/723,894 in view of Huesman et al. (Preliminary studies of cardiac motion in positron emission tomography. Report LBNL-41433, Lawrence Berkeley National Laboratory. March 29, 2001.). The instant application claims methods and systems for combined retrospective and prospective gating. The conflicting application claims methods and systems for retrospective gating only. Huesman (2001) teaches the advantages of combined gating (Abstract). It would be obvious to one of reasonable skill in the art at the time of invention to modify the co-pending invention to further include prospective gating means and methods, in view of the teachings of Huesman (2001).

This is a <u>provisional</u> obviousness-type double patenting rejection.

# Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Huesman et al (Preliminary studies of cardiac motion in positron emission tomography. *Report LBNL-41433, Lawrence Berkeley National Laboratory*. March 29, 2001.), hereinafter Huesman (2001).

Regarding claims 1-4, 13-16 and 21-40, Huesman (2001) discloses an imaging system, which must inherently contain a computer program, and a method for imaging the heart with means and steps for double-gating the image data for both respiratory and cardiac motion correction (Abstract). Huesman (2001) discloses means and steps for acquiring motion data for the lungs and the heart using both an EKG and a pneumatic bellows apparatus (p. 6 ¶ 1), which constitute an electrical sensor with measurement system, and a non-electrical sensor with measurement system, respectively, as claimed in the instant application. Huesman (2001) extracts two prospective gating points, end inspiration and end expiration, and two retrospective gating points, end-diastole and end-systole (Fig. 7). Huesman (2001) also discloses means and steps for acquiring image data of the heart and subsequently processing a portion of the image

Application/Control Number:

10/723,857 Art Unit: 3737

data to compensate for motion artifacts, including means and steps for reconstructing and displaying the image (Fig. 7, p. 9 ¶ 1).

Regarding claims 5-12 and 17-20, Huesman (2001) additionally discloses initiating the image data based on a first prospective gating point ("peak inspiration" or "near maximum expiration" p. 4) and also terminates image data acquisition based on a prospective gating point ("7 cardiac gates" p. 4).

7. Examiner hereby acknowledges Applicant's invocation of paragraph 6 of 35 U.S.C. § 112 in claims 4, 8, 12, 16, 20, 28, 36, and 40. However, all means and steps recited in these claims are anticipated by the Huesman (2001) reference as discussed above.

### Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parikha S. Mehta whose telephone number is 571.272.3248. The examiner can normally be reached on M-F, 8 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571.272.4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

.10/723,857 Art Unit: 3737

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Parikha S. Mehta

Examiner - Art Unit 3737

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700